

Claims

1. Method for fastening components to initially closed hollow profiles, wherein walls of the component and hollow profile are joined together matingly, characterized in that the walls (4, 5) to be combined are in contact with one another and an external pressure is applied to them locally, such that the walls (4, 5) are forced into the interior (12) of the hollow profile (3) while the walls (4, 5) are clamped to one another.
2. Method according to claim 1, characterized in that the forcing-in is performed mechanically by means of a plunger (8).
3. Method according to claim 1, characterized in that the forcing-in is performed directly by a fluidic pressure medium.
4. Method according to any one of claims 1 to 3, characterized in that the component (2) is fastened with its wall (5) to the inside of the hollow profile wall (4).
5. Method according to any one of claims 1 to 3, characterized in that the component (2) is fastened with its wall (5) externally on the hollow profile wall (4).
6. Method according to any one of claims 1 to 5, characterized in that the component (2) is configured as a hollow profile and is fitted together before it is fastened to the hollow profile (3).
7. Method according to any one of claims 1 to 5, characterized in that the component (2) is fastened with a flange to the hollow profile (3).
8. Method according to any one of claims 1 to 7, characterized in that the walls (4, 5) is [are?] forced into a recess (7, 32) formed at the circumference of a

mandrel (6, 31) up to contact with the wall (4, 5) of the component (2) or of the hollow profile (3) against the recess wall (7, 32) in a contour-matching manner.

9. Method according to any one of claims 1 to 8, characterized in that upon the forcing in of the walls (4, 5) by a counter-pressure exerted from the interior (12) of the hollow profile (3) undercuts (13, 14) are formed.
10. Method according to claim 9, characterized in that the counter-pressure is produced by a fluidic internal high pressure in the hollow profile (3).
11. Method according to either one of claims 9 or 10, characterized in that the undercuts (13, 14) are formed by means of a radial flaring out of a spreadable end (19) facing the hollow profile (19) of a plunger (8) situated in an indenting position.
12. Method according to any one of claims 1 to 11, characterized in that, before the arrangement of the walls (4, 5) of component (2) and hollow profile (3) that are to be fastened to one another, at least one of the walls (4, 5) is provided with an adhesive and that, after the formation of the double-walled indentation (10), the adhesiveness of the adhesive is activated preferably by heat treatment.
13. Method according to any one of claims 1 to 11, characterized in that, before the arrangement of the walls (4, 5) to be fastened to one another, at least one of the walls (4, 5) is coated with solder and that after the formation of the double-walled indentation (10) the component (2) and the hollow profile (3) are soldered together by heat treatment of the solder.
14. Method according to any one of claims 1 to 13, characterized in that the hollow profile (13) is formed from two superimposed skelps by means of fluidic internal high pressure, and that the pressing is performed during or after the internal high pressure forming of the skelps.

15. Device for fastening components to initially closed hollow profiles, with a receiver in which the hollow profile and the component are held such that walls of the hollow profile and of the component are in contact with one another, and with a pressure medium by whose action the walls can be joined interlockingly, characterized in that the pressure medium is disposed locally outside of the hollow profile (3) and is made movable such that the walls (4, 5) can be forced into the interior of the hollow profile (3) with formation of a double-walled indentation (10) and are clampable together.
16. Device according to claim 15, characterized in that the pressure medium is a fluid pressure pad (25).
17. Device according to claim 15, characterized in that the pressure medium is a plunger (8) provided at the rear with a driver.
18. Device according to any one of claims 15 to 17, characterized in that the receiver is an internal high pressure forming tool (15, 26).
19. Device according to any one of claims 15 to 18, characterized in that the device (1) contains a mandrel (6) which can be pushed into the hollow profile (3) and forms a matrix for the pressure medium, a recess (7) open in the pushing direction being formed on its circumference, which forms a matrix gravure into which the walls (4, 5) can be pressed for seaming by means of the pressure medium.
20. Device according to claim 19, characterized in that the mandrel (6) is an axial plunger sealing off an internal high pressure forming tool (15, 26).
21. Device according to either one of claims 19 or 20, characterized in that the indentation (7, 32) has undercut surfaces.
22. Device according to claim 21, characterized in that the undercut surfaces are formed in the manner of a dovetail (11).

23. Device according to either one of claims 19 or 20, characterized in that the mandrel (6, 31) has an axial fluid passage (37) from which a radial passage (38) branches, which opens in the indentation (7, 32).
24. Device according to any one of claims 17 to 23, characterized in that the plunger (8) can be spread open at its end (19) facing the hollow profile.
25. Device according to any one of claims 15 to 24, characterized in that the device (1) has a diaphragm or a tubular bellows (40) which can be introduced into the hollow profile (3) and is supported internally during the insertion procedure, the membrane or the bellows (40) forming part of a mold into which the walls (4, 5) can be pressed.